# Summary Livingstone Property CAM Claims Area NTS 105E/8 Whitehorse, Yukon Mining District

# **Location, Access and Claims**

The original 142 CAM Claims were staked in 1997 to cover 5 of the 6 placer creeks which make up the Livingstone placer camp. Sporadic mining is still being carried on in the camp 113 years after the first placer gold was discovered. The CAM Claims are located on NTS Map Sheet 105 E/8 at approximately Latitude 61° 19' N; Longitude 134° 17' W; within the Whitehorse Mining District, Yukon.

A 75-mile winter road from Lake Laberge, just north of Whitehorse, provides access to the Livingstone Creek area. The Livingstone area has several airstrips so access is usually via fixed-wing aircraft from Whitehorse; approximately 50 air miles (80 kilometres) to the south-southwest. The main Livingstone airstrip is 4000 feet (1220 metres) long and has had DC-3 and Caribou aircraft landed on it. The extensive placer mining in the area has resulted in the presence of cat trails up most of the creeks within the claim block. These trails have become heavily overgrown since 2000, but still offer fairly good access to many areas with all-terrain vehicles.

### **Claim Information:**

Claim Name	<b>Grant Numbers</b>	<b>Expiry Date</b>
CAM 1 – 26	YB 97530 – YB 97555	May 16, 2012
CAM 51 86	YB 97580 – YB 97615	May 16, 2012
CAM 143 - 146	YC 08748 - YC 08751	May 19, 2012
CAM 157 - 159	YC 40019 - YC 40021	May 16, 2012
CAM 161	YC 40023	May 16, 2012
CAM 163	YC 40025	May 16, 2012
CAM 172 – 180	YC 40034 – YC 40042	May 16, 2012

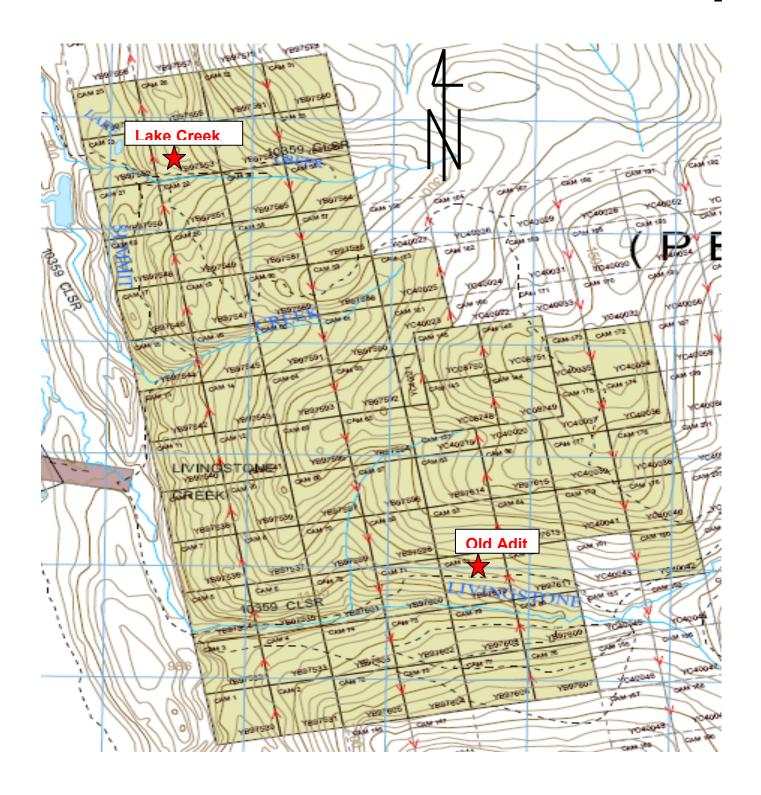
<sup>\*\*</sup> Assessment has been filed to extend the expiry dates to 2013

# **Placer Mining History**

Placer gold was found in 1898 by miners on their way to the Klondike. At the turn of the century, a community of approximately 300 people lived in the area; most in a settlement on the flats below Summit and Livingstone Creeks. A detachment of three Northwest Mounted Police was even established near the settlement.

Six creeks in the area: Martin, Livingstone, Summit, Lake, Cottoneva, and Little Violet, have received most of the exploration and mining. The Cam Claims now cover the lower reaches of Livingstone, Summit and Lake Creeks. Livingstone and Cottoneva Creeks have the longest drainages and have had the most work done on them.

Much of the recovered gold contains large, rough nuggets. Many of the nuggets are encased or are attached to quartz and other country rock. The gold has been eroded primarily from quartz veins and stringers which strike perpendicular to the flow of the creeks. McConnell glaciers moved over the area from the south-southeast, preserving the placer gold by covering the creeks with variable thicknesses of till. The gold has a high purity of 860 – 895 fineness. The amount of gold reported from the Livingstone creeks is 50,000 troy ounces. However, much of the gold produced by the "old-timers" went unreported and, because of this, placer gold production is estimated to be closer to 100,000 troy ounces.



# CAM CLAIMS PART OF CLAIM MAP NTS 105 E/8 NOT TO SCALE

# Geology

Most of the placer gold is believed to have eroded from quartz veins and stringers along faults paralleling the Big Salmon Fault (runs along western edge of claims). The Cam Claims were staked over these faults in areas where placer mining indicated less overburden cover. Concentrations of gold were considered to have been emplaced in the quartz veins along the fractures in the Lower Mississippian or older age calcareous and graphitic metasediments (Snowcap Complex; Colpron) which I believed were the result of doming from the intrusion of an Early Mississippian (~350 Ma.) tonalite-granodiorite intrusive (Colpron, 2005). These fractures are clearly evident in the air photo lineations tracings figure (next page). This mineralization model is known as Thermal Aureole Gold (TAG). The gold was believed to have been remobilized and concentrated by the Big Salmon Fault which has an age of approximately 100 Ma.

My previous exploration of the property had been centered on finding this TAG-type mineralization.

During the winter of 2009, Colpron suggested to me that the historic placer creeks in the region may be the expression of extensional fracturing from the dextral movement along the D'Abbadie (approx. 35 kms.) and Big Salmon Faults (57 kms.). His mapping (Open File #2005 – 9) gives evidence for this possibility with his interpreting faults down the canyon at the lower end of Mendocina Creek; another possible fault segment along Livingstone Creek; and another fault extending westward from the D'Abbadie Fault into the area approximately halfway between those two fault segments (See page 5). The strike of these interpreted extensional faults approximates that of the historic placer creeks. The D'Abbadie Fault has been dated at 96 Ma; the Big Salmon Fault is expected to have a similar age (Colpron, per. comm.).

My work during 2010 and again in 2011 was to investigate the existence of these extensional faults. The existence of these faults has been postulated for years but, primarily due to overburden thicknesses approaching 50 metres, no visible evidence has been found. My sampling in 2010 was concentrated in areas where the Mississippian fractures were crossed by the Cretaceous creek-faults. I did this in the belief that Cretaceous mineralization in the creek-faults would find the ground more open there and concentrate more easily.

## **Other Significant Exploration Results:**

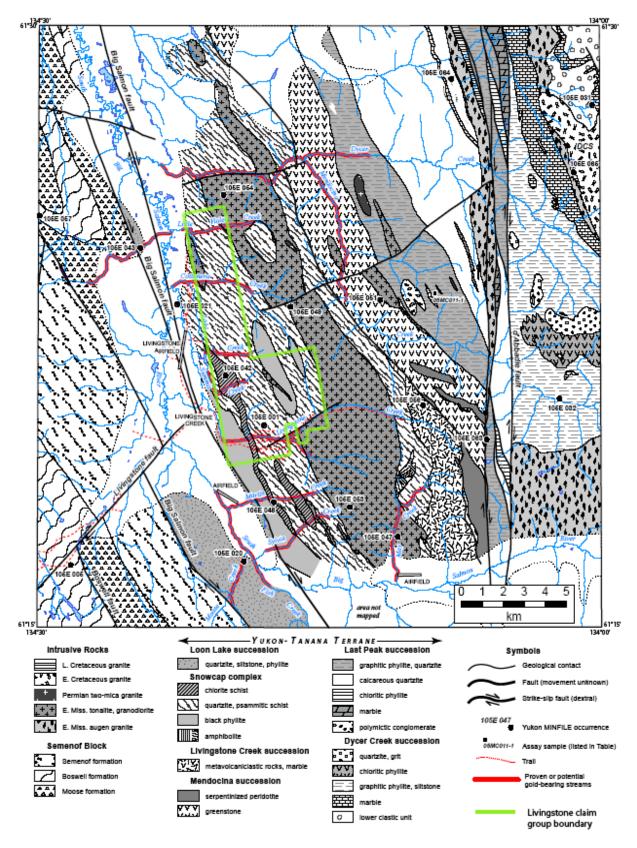
- 1. 2 metre X 2 metre boudin in the nose of upright antiform (old adit site, north side Livingstone Creek, Cam 71) **4.5 grams gold over 14.5 metres**
- 2. Down dip extension of above (?) 5 metres vertically below. **0.2 grams gold over 20 metres**
- 3. Trench sampling 10 metres vertically above old adit. **4.89 grams gold over 2.84 metres**
- 4. Lake Creek campsite samples (Cam 24)

Road cut grab (Viceroy 3.1 grams, Carlyle 0.26 grams)
Trench 12 metres north: 0.19 grams over 5 metres
Trench further 90 metres north: 0.17 grams over 20.5 metres

## **Contact:**

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From Colpron, M., 2006. Geology and mineral potential of Yukon-Tanana Terrane in the Livingstone Creek area (NTS 105E/8), south-central Yukon. *In*: Yukon Exploration and Geology, 2005, D.S. Emond, G.D. Bradshaw, L.L. Lewis and L.H. Weston (eds.), Yukon Geological Survey, p. 93-107.